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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Arndt Glaesser

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EXAMINER

HOWELL, DANIEL W

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

03/31/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,206	Applicant(s) GLAESSER, ARNDT	
	Examiner Daniel W. Howell	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Jansen et al (5112966). As seen from figures 1-4, Jansen et al is also directed to avoiding interference between a milling tool 10 and opposed turbine blades 12 while the cutter is located in a depression between the two blades. In operation, the tool is moved along a tool path, and a collision as illustrated at 14 is undesirable. As discussed at column 3, lines 15-26, the exact shape of the workpiece is input into a computer, and this shape is the “collision contour” of present claims 8+. It will inherently have the shape of the workpiece in three-dimensions. The information about the tool shape and dimensions, the machine parameters, and the computer instructions are also input into a computer. The device of Jansen et al then models the successive relative position of the tool and workpiece; that is, the position of the tool relative to the workpiece is “monitored” and “compared.” Should there be an indication that the tool and workpiece will collide, then the operator will change the tool position, orientation, clearance, or pitch angle in order to fix the error and remove any possible damage to the workpiece. Regarding claim 9, the information about the tool shape and dimensions, the machine parameters, and the computer instructions will include the information about the variables such as the cutting advance, lead angles, clearance, and pitch angles. Regarding claim 10, the “shape of the workpiece portion” of lines 15+ of column 3 will inherently have both of the sidewalls, and thus two collision contours. Regarding claims 13, 17, and 22-23, when the operator sees an

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interference or damage and takes action to correct it, that is considered to constitute an "error protocol" or "error message." Regarding claims 14-15, since the cutter tool shape and dimensions have been input into the system, it is considered to be inherent to change the tool diameter if there should be a collision.

3. Regarding the new/amended Abstract submitted with the response of 1-10-09, the abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

4. Claims 18-19 and 26-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims recite a "one-dimensional line in three dimensional space." There is no basis for this subject matter in the specification as originally filed.

5. Claims 18-19 and 26-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims now include the language "one-dimensional line in three dimensional space." This subject matter has not been defined in the specification, such that the scope of this language is unclear.

6. Claims 18-19 and 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. The claims now include the language "one-dimensional line in three dimensional space." The scope of this language is unclear.

7. The amendment filed 1-5-09 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: page 7 has been amended to set forth a "one-dimensional line in three dimensional space."

Applicant is required to cancel the new matter in the reply to this Office Action.

8. Applicant's arguments filed 1-5-09 have been fully considered but they are not persuasive. When reviewing Applicant's arguments, one point stands out. With regard to making a rejection of a claim, what matters is not how a prior art reference works compared with how the invention works, but rather how the prior art disclosure compares with the invention as claimed. Applicant's arguments point out several times how Jensen et al works differently from their device, but the arguments are not directed to how Jensen et al compares with the claimed subject matter. The examiner will immediately acknowledge that Jensen et al operates with some human presence. However, nothing in the claims prohibits that human presence. Page 14 of the arguments comments that, "there is no automated computerized comparison of the tool path with a pre-determined collision contour." However, that language is not in the claims. Claim 8 states that 1) the milling tool is moved along a tool path; 2) at least one collision contour corresponding to the surfaces of the sidewall is defined; 3) the position or orientation of the tool relative to the collision contour is monitored. That's it. That's all. Monitored. Claim 8 has no subject matter in it about "automated computerized comparison." As properly pointed out in the

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rejection, Jansen et al discloses that the position of the tool relative to the workpiece is “monitored” or “compared,” and an operator will perform the appropriate action in order to fix any problem. Regarding item 2) above, the shape of the workpiece is input into the computer, and this is the shape of the “collision contour.” On page 15 regarding the collision contour, Applicant mentions that producing a complete computer generated model image of the workpiece is not “simpler” than Applicant’s device, but there is nothing in claim 8 that excludes Jensen et al from meeting the subject matter *as claimed*. Midway of page 15, Applicant states that Jansent et al does not disclose “automatically monitoring,” but as discussed above, that specific limitation does not appear in claim 8. Nothing in claim 8 precludes an operator from visually observing whether a collision will occur. On page 16, Applicant argues that the collision contour “must correspond *simply* to a surface or edge of a sidewall.” Again, claim 8 does not include the language “correspond simply to a surface or an edge of a sidewall,” and there is nothing in claim 8 to prohibit the exact shape of the workpiece being the collision contour. Applicant argues that this involves “programming, generating and graphically displaying the exact shape of the pertinent portion of the workpiece,” but, again, there is nothing in the claim which prohibits that. Near the bottom of page 16, Applicant once again states that “the present automated method” is not met by a human operator, but, once again, it is pointed out that claim 8 only sets forth the word “monitored.” Regarding claim 13, the claim sets forth only the terms “error protocol and/or and error message.” Giving these terms their broadest reasonable meaning, the human activity is sufficient to meet these broadly set forth concepts.

9.

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10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 571-272-4478. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, David Bryant, may be reached at 571-272-4526.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number to 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3726 at the top of your cover sheet.

/Daniel W. Howell/

Primary Examiner, Art Unit 3726